



U.S. Department of Energy
Office of Civilian Radioactive Waste Management



Repository Program Update

Presented to:
NSNFP Semi-annual Strategy Meeting

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Outline

- ? **License Application status**
- ? **Design flexibility**
- ? **Design status**



License Application Status

- ? **Working toward December 2004 LA submittal**
- ? **Scientific work is critical path**
 - Software validation for TSPA model
 - WP general and local corrosion AMR
- ? **Design work is also delayed**
 - Draft PSA SAR chapters due September 2003
 - LA design forecast complete April 2004
 - PSA SAR chapters forecast complete May 2004
- ? **Funding reduction effect being evaluated**



Design Flexibility

? Focus of alternatives consideration over last six months is on design flexibility to accommodate

- increased waste receipt rates
- increased throughput rates
- simplified handling processes
- reduced construction durations
- alternative waste forms (DOE SNF, HLW, Pu)
- flattened funding profiles
- transportation mode availability



Surface Facilities

- ? **Basic building layouts still under development; to conclude in late June 2003**
- ? **Initial building will have one processing line with dry fuel transfer and three weld stations**
- ? **Subcontract to be awarded for mechanical handling design services; input required from subcontractor in late May 2003; may affect building layouts**
- ? **PSA input being considered in building design**
- ? **Power availability to the site will be major operational consideration**



Subsurface Facilities

- ? **Revised subsurface panel layouts**
 - Progress from center panel to south, then north
 - Delays need for second north construction portal
- ? **Ground control still under evaluation**
 - Will not use any cementitious material in emplacement drifts, including rockbolts
- ? **Transporter from surface to emplacement drift may revert from multiwheeled transporter to rail system**



Waste Package

- ? **LA will include discussion of all ten WPs at a level of detail sufficient to address YMRP**
- ? **LA will also include significantly more detail, effectively at a fabrication level, of four representative WPs**
- ? **WP closure has been simplified**
 - **thinner SS lid with shear ring and seal welds**
 - **middle Alloy 22 lid with fillet weld**
 - **simplified full penetration weld joint configuration on outside Alloy 22 lid**

